# DOCUMENT RESUME

ED 054 931

SE 011 370

AUTHOR TITLE

Mecca, Christyna E.

Directory of Personnel in Research, Technology,

Education, Administration and Management. Developme Activities in the Marine Environment of the Coastal

Plains Region.

INSTITUTION

Coastal Plains Center for Marine Development

Services, Washington, D.C.

PUB DATE

Aug 70

NOTE

50p.

EDRS PRICE

MF-\$0.65 HC-\$3.29

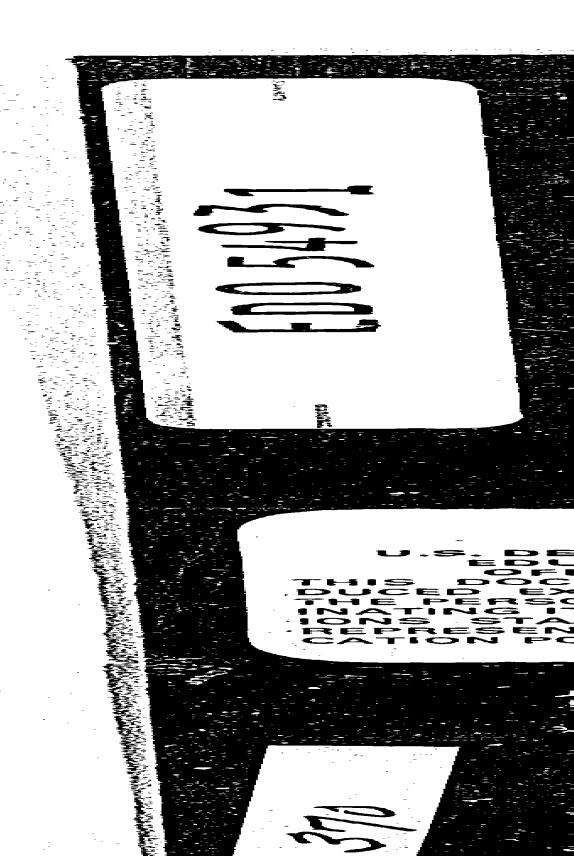
DESCRIPTORS

\*Directories; Earth Science; \*Environment;

\*Oceanology; \*Personnel; \*Scientific Personnel

### ABSTRACT

Listed in this directory are individuals concerned currently with marine activities on the coasts of North Carolina, South Carolina, and Georgia, and the adjacent offshore area, known administratively as the Coastal Plains Region. The categories for t listings include educational institutions, state and county agencie and federal agencies. The field of interest and competence of liste individuals are identified. The Directory concentrates on specialis in technical fields, but also names individuals in advisory and regulatory bodies in the three States concerned with marine and coastal zone problems. An alphabetical index of personnel is also provided. (Author/PR)







# Directory of Personnel in Research, Technology, Education, Administration and Management

# DEVELOPMENT ACTIVITIES IN THE MARINE ENVIRONMENT OF THE COASTAL PLAINS REGION

**Publication 70-1** 

Coastal Plains
Center for Marine Development Services

Washington, D.C.

August 1970



# COASTAL PLAINS REGIONAL COMMISSION

Robert E. McNair	Federal Co-Chairman State Co-Chairman Governor of South Carolina Governor of Georgia Governor of North Carolina		
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A. C. Flora, Jr., Ph.D.  Joseph W. Grimsley  W. Frank Newton	Field Director for South Carolina Acting Field Director for North Carolina Acting Field Director for Georgia		
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Marine Resources Advisory	Committee		
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	Chairman Hampden, South Carolina Chapel Hill, North Carolina Charleston, South Carolina Wilmington, North Carolina Athens, Georgia Raleigh, North Carolina		

# COASTAL PLAINS CENTER FOR MARINE DEVELOPMENT SERVICES

Frederick Betz, Jr., Ph.D	Director
at that IM Paulonels	Oceanographier-Mercoron mar
Philip G. Hill	Oceanographer-Geologist
Christyna E. Mecca, Ph.D.	Biologist

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#### INTRODUCTION

The development and protection of the marine environment, including the coastal zone, throughout the work is dependent largely on contributions of human knowledge, effort, and skill. The numerous factors that play a part in this environment demand a diversity of human capabilities to understand their significance and evaluate them for the greatest common benefit. It is important, therefore, to identify the individuals possessing the special qualifications necessary to perform those tasks which help shape the future of that environment.

In the accompanying Directory, we turn our attention to the individuals concerned currently with the coast of North Carolina, South Carolina, and Georgia, and the adjacent offshore area, known administratively as the Coastal Plains Region.

The Directory lists individuals under institutions and organizations with which they are associated. The fields of interest and competence of the individuals are identified. Thus, the Directory provides a measure of the amount and type of current expertise available to the Coastal Plains Region. It is mainly an inventory of individuals located in the Region, but it also includes individuals who work extensively on problems in the Region although their base of operations lies outside.

The Directory allows judgments to be formed on the gaps in coverage of subjects that are important to the development of the Coastal Plains Region, which must be closed in the future.

The preparation of the Directory was authorized by the Coastal Plains Regional Commission. In 1969 the Commission funded projects in the three States of the Region dealing with resources for marine research and development and plans for the future. The reports were prepared by Dr. John Lyman (Director of Marine Sciences, University of North Carolina at Chapel Hill) for North Carolina, Charles M. Bearden (South Carolina Division of Commercial Fisheries) for South Carolina, and Dr. Gene Bramlett (Associate Director, Institute of Community and Area Development, University of Georgia) for Georgia. The information on personnel supplied in these reports became the basic source for the present Directory. Information of this type is subject to change in short periods of time, and therefore, the Center undertook a thoroughgoing review of the listings, so as to bring them up to date as of July 1, 1970. In addition, the Center expanded the coverage of personnel by canvassing organizations that had not been included in the first inventories.

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The Directory concentrates on specialists in technical fields, but also names individuals in advisory and regulatory bodies in the three States concerned with marine and coastal zone problems. It has not been possible in the scope of this project to point out the members of executive and legislative branches of government at different levels whose contributions to improvement in coastal zone and marine environmental management are essential. Their efforts make possible to a large extent the activities of those listed in the Directory.

The Coastal Plains Center now maintains a file of individuals and organizations concerned with marine and coastal development, so as to make publication of a new edition of the Directory easily possible from time to time and to answer inquiries at any time. We invite additional information appropriate for inclusion in the file.

The present edition of the Directory was prepared by Dr. Christyna E. Mecca of the Center staff.

Readers are advised that an accompanying Directory of marine and coastal zone research and development facilities will be published in the near future.

Frederick Betz, Jr., Ph.D. Director

# **GEORGIA**

# ARMSTRONG STATE COLLEGE

Department of Chemistry and Physics

Fretwell G. Crider Ph.D Professor Physical chemistry

Cedric Stratton Ph.D Assoc. Professor Inorganic chemistry

# BRUNSWICK JUNIOR COLLEGE

Department of Biology

Charles R. Reidlinger Assoc. Professur Embryology

Frances P. Scarboro Assoc. Professor Marine biology

# **EMORY UNIVERSITY**

Department of Biology

Madeline P. Burbanck Ph.D Research Associate Estuarine ecology

William D. Burbanck Ph.D Professor Estuarine ecology

Robert B. Platt Ph.D Professor Plant ecology

Department of Geology

Arthur T. Allen Ph.D Professor Sedimentary processes Department of Statistics and Biometry

Malcolm E. Turner Ph.D Professor Biomathematics

# GEORGIA INSTITUTE OF TECHNOLOGY

School of Architecture

Anthony J. Catanese Ph.D Assoc. Professor Urban and regional planning

Arnal! T. Connet! Assoc. Professor Regional planning; urban design

Malcolm G. Litt'e, Jr.
Professor
Public administration; regulation of coastal development

Joseph N. Smith
Assoc. Professor
Off-and on-shore buildings; water
recreation

School of Biology

Edward L. Fincher Ph.D
Assoc. Professor
Microbial ecosystems and effects of pollution on their activities

John J. Heise Ph.D Assoc. Professor Microbiology of manganese in aquatic life systems; electron-spin resonance techniques

Nancy W. Walls Ph.D
Director and Professor
Microbiological aspects of marine
sediments; pathological organisms in
aquatic environments



# School of Chemical Engineering

G. Leon Bridger Ph.D.

Director and Professor

Fertilizers for shore erosion protective
plant life; desalination; recovery of
values from concentrated brines

Homer V. Grubb Ph.D.
Professor
Materials of construction; stagewise operations

Robert F. Hochman Ph.D.
Professor
Physical metallurgy; corrosion; nondestructive testing

Clyde Orr, Jr. Ph.D.

Regents' Professor

Fine particle dynamics and characterization; sea-air interface phenomena

Henderson C. Ward Ph.D.
Professor
Transport phenomena

# School of Chemistry

Charles L. Liotta Ph.D.
Assoc. Professor
Mechanisms of interaction of organic
solute species and solvents

Robert A. Pierotti Ph.D.
Professor
Solubility of gases in water; the structure of water

Peter E. Sturrock Ph.D.
Assoc. Professor
Improved methods of measuring trace
elements in water

Leon H. Zalkow Ph.D.

Assoc. Professor

Chemistry of marine vegetation

## School of Civil Engineering

Richard D. Barksdale Ph.D.
Assoc. Professor
Dynamics of foundations systems; flow
in porous media

M. R. Carstens Ph.D.
Professor
Scour and bed ripples under oscillatory
flow; coastal engineering; off-shore
structures; sediment transport

A. W. Hoadley Ph.D.
Assoc. Professor
Ecological systems in surface waters

Alan M. Lumb Ph.D.
Asst. Professor
Hydrologic and engineering-economic
systems

C. S. Martin Ph.D.
Assoc. Professor
Hydraulic transients in open channals;
free streamline hydrodynamics; sediment
transport

Paul G. Mayer Ph.D.
Professor
Rollwaves; open channel flow; wave
forces on marine structures

Fred G. Pohland Ph.D.
Assoc: Professor
Industrial waste treatment and control

William M. Sangster Ph.D.

Director and Professor

Stability of stratified flows

George M. Slaughter Ph.D. Assoc. Professor Flow in porous media

George F. Sowers
Regents' Professor
Sampling devices for ocean bottom
materials

Ernest C. Tsivoglou Ph.D.
Professor
Industrial waste treatment and pollution control; reaeration capacity of tidal estuaries

James R. Wallace Sc.D.
Assoc. Professor
Water resources development; statistical
hydrology; hydrologic systems

# School of Engineering Science and Mechanics

#### Helmut F. Bauer Ph.D.

Professor

Hydroelastic sloshing; wave motion; nonlinear vibrations

#### Wilton W. King Ph.D.

Assoc. Professor

Vibrations; wave propagation

# Andrew W. Marris Ph.D.

Regents' Professor

Dynamics; kinematics of flow; vorticity theory; unsteady motion of fluids

# George M. Rentzepis Ph.D.

Assoc. Professor.

Mechanics of composite materials; waves, acoustics

# School of Geophysical Sciences

#### Kevin C. Beck

Asst. Professor\*

Geochemistry; chemistry of fresh and saline waters; marine geology

#### J. H. Reuter Ph.D.

Assoc. Professor

Organic geochemistry; dissolved organic matter in river and ocean waters; organic pollutants

#### J. M. Wampler Ph.D.

Assoc. Professor\*

Isotope geochemistry; radio-active tracers; geochemistry of lead in water and soils

### Charles E. Weaver Ph.D.

**Director and Professor** Geology; chemistry of water; origin of clay minerals and phosphates in sediments

# Herbert L. Windom Ph.D.

Asst. Professor†

Chemical and geological oceanography; geochemistry

## School of Nuclear Engineering

## T. Fisher Craft Ph.D.

Research Chemist

Flow through porous media;

environmental radioactivity

#### Geoffrey G. Eichholz Ph.D.

Professor

Radioisotopic power systems; nuclear analytical methods; radioactive tracer techniques

#### George W. Ledicotte

Professor

Neutron activation analysis; analysis of trace elements in the environment

#### Milton E. McLain

Senior Research Chemist Nuclear analytical techniques; stable tracer techniques for flow measurement

#### James H. Rust Ph.D.

Assoc. Professor

Heat transfer; energy conversion;

mechanics of fluid motion

# J. Richard Williams Ph.D.

Asst. Professor

Propulsion reactors; energy conversion

# School of Physics

#### R. Y. Patronis Ph.D.

Acoustical and electronic instrumentation; sound technology

### LeRoy A. Woodward

Assoc. Professor

Acoustics; microscopy; optical

instrumentation

<sup>\*</sup>Research Associate, Skidaway Institute of Oceanography †Chief, Physical Sciences Division, Skidaway Institute of Oceanography

# Chemical Sciences Materials Division, Engineering Experiment Station

#### James M. Akridge

Senior Research Engineer Materials for marine applications; surface and underwater vehicles and dwellings; extraction of oxygen from sea water

Frederick Bellinger D. Eng.
Professor of Chemical Engineering
Desalination; extraction of minerals,
food, fertilizer; ocean-floor mapping

#### W. H. Burrows

Principal Research Chemist Recovery of protein from fish, molluscs, and sea grasses

John H. Burson III Ph.D.
Senior Research Engineer
Chemistry and physics of surfaces;
powder metallurgy; fine-particle
technology

Robart S. Ingols Ph.D.
Research Professor of Biology
Biochemistry of water; water and waste
treatment; limnology

## John F. Kinney

Senior Research Engineer Underwater acoustics; electromechanical devices; effects of underwater explosions

L. T. Long
Asst. Profescor of Geology
Physical oceanography; seismicity; microearthquake seismic-risk evaluation

#### M. F. Munoz

Senior Research Engineer
Mineral beneficiation; zeta-potential;
genesis of marine minerals

C. C. Ostrander
Research Engineer
Radiometric surveys; neutron activation
analysis; computer applications
to geology and geophysics

#### W. R. Tooke, Jr.

Principal Research Engineer Coatings; corrosion prevention; materials characterization; rheological phenomena

### Electronics Divison, Engineering Experiment Station

# Henry A. Corriher, Jr. Principal Research Engineer Microwave backscatter from sea surfaces

Frederick B. Dyer
Senior Research Physicist
Statistical properties of sea clutter;
backscatter and propagation related to
sea surfaces

# Edward R. Flynt Principal Research Engineer Electronic instrumentation; microwave backscatter from sea surfaces

Robert M. Goodman, Jr.
Principal Research Engineer
Antennas; mechanical devices for marine
applications

Richard C. Johnson Ph.D.
Principal Research Physicist
Electromagnetic microwave backscatter
from sea surfaces and targets

Wayne K. Rivers, Jr.
Principal Research Physicist
Radar Systems; experiment design;
backscatter and propagation related
to sea surfaces

Albart P. Sheppard Ph.D.
Principal Research Physicist
Biological instrumentation; electromagnetic measurements

#### High Temperature Materials Divison, Engineering Experiment Station

Steve H. Bomar, Jr. Ph.D.
Senior Research Engineer
Basic characteristics of materials; CO<sub>2</sub>
laser; high pressure, phase contrast
microscopy

Charles W. Gorton Ph.D.
Professor of Chemical Engineering
Diffusion processes; fluid flow

Joe N. Harris
Senior Research Engineer
Processes and fabrication; felted ceramics

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#### John H. Murphy Ph.D.

Assoc. Professor of Mechanical Engineering Deep submergence structures

#### Nick E. Poulos

Principal Research Engineer Ceramic materials for deep submergence; arc pfcsma coatings

#### J. Walton, Jr.

Principal esearch Engineer
Dielectric materials; biomedical materials;
agricultural frits

# Industrial Development Divison, Engineering Experiment Station

# Robert B. Cassell

Principal Research Economist Industrial siting; plant location; regional economic development

#### Ben E. James, Jr.

Research Engineer
Plant location; economic analysis

#### David C. Morgan

Senior Research Scientist
Economic potentials; plant location

#### B. Sanford Ulmer

Research Engineer
Resource studies; regional economic
development

### Robert Van Geuns

Senior Research Engineer Industrial and economic analysis; regional economics

# George Whitlatch Ph.D.

Principal Research Scientist Industrial siting; water resources; plant location

#### **Environmental Resources Center**

#### C. M. Conway

Asst. Director Water resources planning and development

#### Duane W. Hill Ph.D.

Professor
Politics of natural resources; public administration; social measurements and experimental design

#### L. Douglas James Ph.D.

Assoc. Professor Hydrology; water systems analysis; water resources economics

#### Carl E. Kindsvater

Director and Regents' Professor Coastal engineering; water resources planning and management

#### F. William Kroeck

Instructor
Political and urban geography; water
resources management; resources
administration

#### Gene E. Willeke Ph.D.

Assoc. Professor Hydrology; water systems analysis; resources planning and management; social impact of public works

# GEORGIA SOUTHERN COLLEGE

# Department of Geology

William J. Neal Ph.D. Asst. Professor Ocean sediments

# **GEORGIA STATE UNIVERSITY**

## Department of Biology

#### Donald G. Ahearn Ph.D.

Assoc. Professor Ecology, physiology, systematics of marine yeasts; biodegradation of hydrocarbon and wood pulp wastes

#### Fred K. Parrish Ph.D.

Assoc. Professor
Pollution factors in shellfish culture

# Department of Chemistry

H. James Bronaugh Ph.D.
Assoc. Professor
Extractive metallurgy of sedimends

## Department of Geology

Frederick H. Manley Ph.D.
Assoc. Professor
Composition and formation of marine clays

# SKIDAWAY INSTITUTE OF OCEANOGRAPHY

James W. Andrews, Jr. Ph.D.
Senior Research Scientist
Marine foods; nutrition and metabolism in
marine life; aquaculture

#### Lee H. Knight

Asst. Director, Services and Research Engineer
Electro-mechanical devices; thermodynamics; underwater acoustics

David W. Menzel Ph.D. Director\*

#### Howard H. Yen Ph.D.

Senior Research Scientist in Engineering Thermodynamics; underwater acoustics and propulsion

# UNIVERSITY OF GEORGIA

# Bureau of Business and Economic Research

W. Wray Buchanan Administrative Assitant-Services Georgia travel industry

Polly W. Hein
Research Associate
Development of tourism in Georgia

\*Effective September 1, 1970

# Adolph Sanders Research Associate Development of tourism in Georgia

### Cooperative Fisheries Research Umit

laumes P. Clugston
Asst. Unit Leader
Physiology of fisheries production

### Unit Leader and Research Associate
Fisheries management

## Department of Agricultural Economics

Evan E. Brown Ph.D.
Professor
Economics of commercial fishing in
Georgia

# Department of Biochemistry

Raymond B. Ashworth Ph.D. Asst. Professor Biochemistry of marine organisms

Milton J. Cormier Ph.D. Assoc. Professor Chemistry of bioluminescence

## Department of Botany

Wilbur Duncan Ph.D.
Professor
Systematics of coastal vegetation

## Department of Geography

Louis DeVorsey, Jr. Ph.D.
Assoc. Professor
Patterns of colonial land ownership along
the south Atlantic coast

James B. Kenyon Ph.D. Asst. Professor Urban geography of coastal cities

James A. Shear Ph.D.
Professor
Water balance problems; physical oceanography



Richard A. Stephenson Ph.D. Asst. Professor Coastal plains landforms

James F. Woodruff Ph.D. Professor Atlantic coastline morphology

# Department of Geology

Robert E. Carver Ph.D.

Asst. Professor
Sedimentary petrology; industrial mineralogy

Vernon J. Hurst Ph.D.
Professor
Crystallography; experimental petrology;
economic geology

John E. Noakes Ph.D.
Assoc. Professor and Research
Associate\*
Radio-carbon dating of sediments

Barun K. Sen Gupta Ph.D. Asst. Professor\* Micropaleontology

Edward A. Stanley Ph.D.
Assoc. Professor
Palynology, paleontology

Hartmut Wiedemann Ph.D.

Asst. Professor\*

Marine geology; geochemistry of sediments

#### Department of Microbiology

William J. Wiebe Ph.D. Asst. Professor Marine microbiology

# Department of Sociology, Anthropology and Archaeology

Joseph R. Caldwell Ph.D.
Professor
Archaeology of the south Atlantic
coast

\*Visiting staff, U. of Ga. Marine Institute, Sapelo

## Department of Zoology

Research Associate
Nutrition of plankton organisms

Eugene P. Odum Ph.D.
i'rofessor and Senior Research
Associate\*
Ecology of coastal environment ecosystems

Lawrence R. Pomeroy Ph.D.
Professor and Senior Research
Associate\*
Energetics and cycles of essential
elements

# Institute of Community and Area Development

Gene A. Bramlett Ph.D.
Assoc. Director
Development of Georgia's coastal
resources

# Institute of Natural Resources

E. L. Cheatum Ph.D.

Director†

Marine biclogy; marine resources administration

Edward Chin Ph.D.
Assoc. Director, Marine Resources
Estuarine ecology; crustacean
biology

David Harrington

Marine fishery specialist

Gear research and development

A. S. Johnson Ph.D.
Assoc. Director, Biological Resources
Wildlife biology; land use ecology

Ronald M. North Ph.D.
Assoc. Director, Water Resources
Studies of the economic structure for water

†Director, Marine Program Development, University System of Georgia

#### School of Forest Resources

John D. Hewlett Ph.D. Professor of Forest Hydrology Watershed management

Melvin T. Huish Ph.D.
Asst. Professor of Fisheries Biology
Fisheries biology

James H. Jenkins Ph.D.
Professor of Wildlife Ecology
Uptake of radioactive fallout in fish and wildlife

Wade L. Nutter Ph.D.

Asst. Professor of Forest Hydrology
Sub-surface flow and nutrient cycling

# UNIVERSITY OF GEORGIA MARINE INSTITUTE

Michael D. Dahlberg Ph.D.

Asst. Professor of Zoology
Systematics and ecology of estuarine and nearshore fishes; flat cycles of shad and mullet

Dirk Frankenberg Ph.D.
Assoc. Professor of Zoology
Isopod physiology and animal-sediment
relationships

Robert W. Frey Ph.D.
Research Associate
Studies of modern burrows and bioturbation features

Albert G. Greene, Jr. Ph.D.

Asst, Director and Research Associate
Physiology of halophytes

Vernon J. Henry, Jr. Ph.D.
Director and Assoc. Professor of
Geology
Distribution and transport of estuarine
and continental shelf sediments

James D. Howard Ph.D.
Asst. Professor of Geology
Analogies between recent and ancient
sedimentary environments; trace fossils;
X-ray radiology of sedimentary textures

John H. Hoyt Ph.D.
Assoc. Professor of Geology
Sedimentation, stratigraphy and
structure of coastal Georgia, and
southeast U.S.

Frederick C. Marland Ph.D.
Research Associate
Ecology of salt marsh invertebrates; carbon budget of a small marsh watershed

Robert J. Reimold Ph.D.

Asst. Professor of Zoology
Biogeochemical cycling of elements and radionuclides in salt marsh and estuarine ecosystems

Frederick G. Smith D.V.M. Research Associate Diseases of estuarine fishes

# Ga. Department of Mines, Mining and Geology

J. H. Auvil, Jr.
Director
Geology and oceanography; off-shore
mineral resources; stratigraphy; heavy
mineral deposits

# Ga. Game and Fish Commission, Coastal Fisheries Division

John G. Adams

Marine Biologist and Asst. Project Leader

Commercial marine resources of the

Georgia coast

William W. Anderson
Chief, Coastal Fisheries Research and
Development Program
Ecology of Georgia's estuarine waters

David H. G. Gould
Supervisor of Coastal Fisheries
Coastal fisheries

# Ga. State Water Quality Control Board

R. S. Howard, Jr.
Executive Secretary
Regulation and enforcement of water
quality standards; waste water treatment
and control

# Ocean Science Center of the Atlantic Commission

John F. McGowan Asst. Director

# Thomas H. Suddath

Executive Director
Technical advisor to state agencies concerning coastal and marine development; establish marine resources extension centers

U.S. Department of Agriculture, Agricultural Research Service, Soil And Water Conservation, Research Division, Coastal Plains Experiment Station

A. W. Thomas

Soil erosion and crop management

U.S. Department of Health, Education and Welfare, Public Health Service

Roger Olmstead

Head, Shellfish Inspection and Control
Divison
Research in shellfish processing and
packaging

# U.S. Department of the Interior, Bureau of Commercial Fisheries

Robert Cummings, Jr.
Station Chief, Exploratory Fisheries Unit
Exploratory fishing and gear research

Ray Maurier Fisheries Biologist

Lenard May Fisheries Biologist

Raymond Nelson Fisheries Biologist

J. B. Rivers
Fisheries methods and equipment specialist

# U.S. Department of the Interior, Bureau of Outdoor Recreation

Roy K. Woods

Regional Director

Recreation research on the coastal area

U.S. Department of the Interior, Bureau of Sport Fisheries & Wildlife, Southeastern Fish Control Laboratory

## Ralph M. Burress Chief

Studies on chemical compounds and their effects on fish, as toxicants, anesthetics, or sterilants

U.S. Department of the Interior, Federal Water Quality Administration, Southeastern Water Laboratory

David W. Duttweiler Ph.D., P.E.
Director
Water pollution control: fate of
pollutants in fresh waters; development
of physical-chemical analytical methods

# U.S. Department of the Interior, Geological Survey

#### H. B. Counts

Director, Savannah Project, and Hydrologist Salt water contamination studies of aquifer around Savannah

# John R. George

Regional Director at Atlanta Pollution and hydrology study, salt water contamination around Brunswick and Savannah

#### Dean C. Gregg

Director at Brunswick and Hydrologist Salt water contamination

# Dames & Moore, Consulting Engineers

#### Benjamin S. Persons

Partner, Atlanta Office Consulting engineers in applied earth sciences; hydrological studies; oceanographic studies

# Hercules Powder Co.

#### C. E. Tyler

Chemical Superintendent Pollution abatement

# Law Engineering Testing Company

# Gordon B. Dalrymple

President
Geotechnical engineering and consultation
for off-shore structures; commercial and
environmental testing and evaluation

# Maves. Sudderth and Etheredge, Inc.

#### C. E. Etheredge Engineer

George Hardy Engineer

#### Joe A. Mayes

Director and Professional Engineer Sanitary and civil engineering; consulting and planning; water and sewage facilities; stream analysis; pollution control studies

#### B. D. Sudderth Engineer

. .

# NORTH CAROLINA

# CAPE FEAR TECHNICAL INSTITUTE†

Walter A. Arseneault Instructor Math; naviagation; seamanship; cartography

Roger H. Averette
Instructor
Physics; oceanography; chemistry and
biology

Emmett J. Gossen
Instructor
Chief Engineer, R/V Advance II; marine
engineering and equipment

Arthur W. Jordan Captain
Coordinator of Marine Technology
Master, R/V Advance II; marine
technology instructor; oceanology and
fishing operations

M. J. McLeod
President
Technical training

Brian T. Sullivan Second Mate, R/V Advance II

Robert H. Williams
Instructor
1st Engineer, R/V Advance II

# **DUKE UNIVERSITY**

Department of Biochemistry

James B. Sullivan III Ph.D. Asst. Professor Biochemical evolution

# Department of Botany

T. W. Johnson, Jr. Ph.D. Chairman and Professor Marine and fresh water fungi

Richard B. Searles Ph.D. Assoc. Professor Marine algae

Robert Wilbur Assoc. Professor Coastal vegetation

# Department of Chemistry

Louis D. Quin Ph.D.
Professor
Chemistry of marine organisms

# Department of Civil Engineering

David W. Hill Ph.D. Assoc. Professor Ocean engineering

# Department of Electrical Engineering

L. W. Nolte Ph.D.
Assoc. Professor
Statistical signal processing and communications in underwater acoustics

# Department of Geology

William J. Furbish Ph.D.
Assoc. Professor
Mineralogy of marine deposits

S. Duncan Heron, Jr. Ph.D. Assoc. Professor Mineralogy of marine deposits

†Personnel listings as of 1969; later information not available

George W. Lynts Ph.D.

Asst. Professor

Marine geology; micropaleontology

Ronald D. Perkins Ph.D.

Assoc. Professor

Shallow marine geology

Orrin H. Pilkey Ph.D.

Assoc. Professor

Marine geology; sedimentation

# Department of Mechanical Engineering

J. Sigfred Linderoth, Jr.

Professor

Ocean engineering

# Department of Physiology

John Gutknecht Ph.D.

Asst. Professor

lonic and osmotic regulation in

crustaceans

## Department of Zoology

Charles Epifanio

Effect of dieldrin on larvae of decapod

crustaceans

Stephen Sulkin

Pressure effects on crustacean larvae

Stephen A. Wainwright Ph.D.

Assoc. Professor

Barnacies and corais

Karl M. Wilbur Ph.D.

**Professor** 

Molluscan physiology

#### Duke University Medical Center

D. F. L. Ginn Ph.D.

Asst, Professor

Cell volume control of epithelium

Bryan Hills Ph.D.

Assoc, Professor

Diving physiology

Johannes A. Kylstra Ph.D.

Assoc, Professor

Physic!cgy of breathing sea-water

Herbert A. Saltzman Ph.D.

**Professor** 

Hyperbaric oxygenation; biomedical response to unusual environments

Wirt W. Smith Ph.D.

Assoc, Professor

Hyperbaric oxygenation; pressure

physiology

B. F. Trump Ph.D.

Professor

Plasmalemmal alterations of marine

animals

# School of Engineering

Bruce J. Muga Ph.D.

Assoc. Professor Coastal and ocean engineering, and

construction

# **DUKE UNIVERSITY MARINE** LABORATORY

Richard T. Barber Ph.D.

Assoc. Professo.

Biological oceanography

Cazivn G. Bookhout Ph.D.

Invertebrate zoology; larval ecology

John D. Costlow, Jr. Ph.D.

**Director and Professor** 

Crustacean development

Bruce C. Coull Ph.D.

NSF Postdoctoral Awardee

Shelf, slope, and deep sea melobenthos

**Professor Emeritus** 

Marina ecology

Susan A. Huntsman Ph.D.

Research Associate Phytoplankton physiology Charles Kellogg
Ecology and behavior of marine invertebrates

Lynda Murphy
Antiquity of abyssal fauna

Eric B. Nelson
Asst. Marine Superintendent of
Oceanographic Operations
Oceanography

John G. Newton
Marine Superintendent of Oceanographic
Operations
Oceanography; physiography of
Carolina continental margins

Michele Regnault Docteur 3 eme cycle Research Associate Shrimp development

Unnsteinn Stefansson Ph.D.
Professor
Physical and chemical oceanography

John P. Sutherland Ph.D. Asst. Professor Marine ecology

Robert Tucker

Amino acid metabolism in crab farvae

Joanne Whitney Ph.D. Research Associate Lipid metabolism in Crustacea

# EAST CAROLINA COLLEGE

# Department of Biology

Frances P. Belcik
Instructor
Invertebrate parasitology

Vincent J. Bellis Ph.D.

Asst. Professor
Algal ecology; relation of estuarine
algae to water quality

Charles E. Bland Ph.D.
Asst. Professor
Fungi on eggs of marine invertebrates

Joseph G. Boyette Ph.D. Professor Ichthyວໄດ້gy; animal behavior

Graham J. Davis Ph.D. Chairman and Professor Physiology of aquatic plants

John S. Laurie Ph.D.
Assoc. Professor
Invertebrate parasite physiology

James S. McDaniel Ph.D. Asst. Professor Parasitology of marine fish

Edward P. Ryan Ph.D.
Assoc. Professor
Reproductive biology of the marine decapods

Mason Smith Ph.D.
Asst. Professor
Immune response in fishes

#### Department of Geography

Leonard Gustafson
Asst. Professor
Coastal microclimates

David H. Stillwell
Assoc. Professor
Recreational use of coastal land

# Department of Geology

B. A. Bishop Ph.D.
Asst. Professor
Carbonate environments

C. Q. Brown Ph.D. Professor Clay mineralogy; geochemistry

A. Ray Jennings Ph.D.

Assoc. Professor

Hydrology of coastal plain

Richard L. Maugger Ph.D.
Asst. Professor
Geochemistry of estuarine environment

#### Michael P. O'Conner Ph.D.

Asst. Professor Marine geology; paleoecology; estuarine sediment deposits; mineral exploration

#### Stanley R. Riggs Ph.D.

Asst. Professor Marine geology; economic geology; estuarine sediment deposits; mineral exploration

# Marine Science Center, Manteo

#### Charles W. O'Rear, Jr.

Director
Fish metabolism; chemistry of natural
waters; bacterial flora of striped bass;
nutritional needs of anadromous fish

# NORTH CAROLINA STATE UNIVERSITY

# Department of Biochemistry

lan S. Longmuir Ph.D.
Professor
Response of organisms to high pressures

# Department of Biological and Agricultural Engineering

# Henry D. Bowen Ph.D.

Professor Biophysics of marine plant environments

# George J. Kriz Ph.D.

Assoc. Professor

Model to determine fresh water
availability

#### David A. Link Ph.D.

Assoc, Professor
Systems engineering and instrumentation
for biological research

# Charles W. Suggs Ph.D.

Professor Human factors in equipment design

## Department of Botany

#### Arthur W. Cooper Ph.D.

Professor Coastal ecology

#### Larry A. Whitford Ph.D.

Professor

Ecology and taxonomy of algae

# Department of Chemical Engineering

#### Kenneth O. Beatty Ph.D.

Professor Fluid dynamics; heat transfer; highspeed photography

# Harold B. Hopfenberg Ph.D.

Assoc. Professor

Diffusion and absorption in membranes

#### David B. Marsland Ph.D.

Assoc. Professor
Transport processes; thermodynamics
and desalinization

#### Edward M. Shoenborn Ph.D.

Professor

Phase equilibrium and diffusional operations; distillation; mass transfer

#### Vivian T. Stannett Ph.D.

Professor

Polymer science and membrane technology

#### Department of Chemistry

#### Lawrence H. Bowen Ph.D.

Assoc. Professor

Aqueous solution chemistry

### M. Keith DeArmond Ph.D.

Assoc. Professor

Chemical oceanography

#### Forrest W. Getzen Ph.D.

Assoc. Professor

Aqueous solution chemistry

# Forrest C. Hentz, Jr. Ph.D.

Assoc. Professor

Aqueous chemistry of heavy-metal ions

# Samuel G. Levine Ph.D.

Professor

Isolation and structure determination of sterols and other marine substances

### George H. Wahl Ph.D.

Assoc. Professor

Organic chemistry in aqueous solutions

#### Raymond C. White Ph.D.

Professor

Chlorophyll and derivatives in marine life and oceanic sediment

#### Department of Civil Engineering

#### Michael Amein Ph.D.

Assoc. Professor

Fluid dynamics

#### Newton V. Colston Ph.D.

Asst. Professor

Marine engineering

#### William S. Galler Ph.D.

Assoc. Professor

Use of mathematical programming for optimal design of environmental systems

# L. Jay Langfelder Ph.D.

Assoc. Professor

Engineering properties of marine sediments

#### Jerry L. Mechemehl Ph.D.

Asst. Professor

Coastal engineering

#### Charles Smallwood, Jr..

Professor

Biological treatment of wastes in sea

water

# Department of Economics

# R. A. King Ph.D.

Professor

Fishery economics

## Department of Engineering Mechanics

# John A. Edwards Ph.D.

Assoc. Professor

Fluid mechanics and transport phenomena

# Patrick H. McDonald Ph.D.

Professor

Underwater transducers and sonic

sources

# Department of Food Science

#### Roy E. Carawan

Extension specialist

Seafood processing

#### Victor A. Jones Ph.D.

Assoc. Professor

Seafood processing

#### Frank B. Thomas Ph.D.

Professor

Seafood processing

#### Neil B. Webb Ph.D.

Assoc. Professor

Seafood processing; biochemical

properties of water-protein inter-

relationship

## Department of Genetics

# Daniel S. Grosch Ph.D.

Professor

Genetics of marine organisms; radiation

biology

# Department of Geosciences

#### Henry S. Brown Ph.D.

Professor

Marine geology and geochemistry

#### Norden E. Huang Ph.D.

Asst. Professor

Physical oceanography; fluid

mechanics

# Carlton J. Leith Ph.D.

Professor

Sedimentation; engineering geology;

applied geophysics

#### Walter J. Saucier Ph.D

Professor

Marine meteorology

James R. Smith
Adjunct Assoc. Professor
Marine meteorology

Charles W. Welby Ph.D. Assoc. Professor Marine sediments

# Department of Mechanical and Aerospace Engineering

Jesse S. Doolittle
Professor
Thermodynamics of desalinization
processes

Francis J. Hale Ph.D.
Assoc. Professor
Control problems in desalinization
systems

Franklin D. Hart Ph.D.
Asst. Professor
Underwater acoustics problems

Lalji J. Pavagadhi Ph.D.
Adjunct Asst. Professor
Fluid dynamics and heat transfer from
underwater bodies

John N. Perkins
Assoc. Professor
Motion of multicomponent fluid flows

Robert M. Pinkerton
Professor
Low speed fluid flow around submerged
bodies

Larry H. Royster Ph.D. Asst. Professor Underwater acoustics

Frederick O. Smetana Ph.D.
Professor
Motion of fluid masses under the influence of density gradients

James E. Sunderland Ph.D.
Professor
Heat and mass transfer from biological
substances

Robert W. Truitt Ph.D.
Professor
Dynamics of fluid motion

James C. Williams, III Ph.D. Professor Aerodynamics and boundary layer theory

James Woodburn Ph.D.
Professor
Underwater acoustical propagation

# Department of Microbiology

Gerald H. Eikan Ph.D.
Assoc. Professor
Use of nitrogen fixation by marine
micro-organisms

Jerome J. Perry Ph.D.

Assoc. Professor

Marine geomicrobiology

# Department of Nuclear Engineering

James R. Bohannon, Jr. Ph.D. Assoc. Professor Trace metals in seawater

# Department of Poultry Science

Charles H. Hill Ph.D.
Professor
Use of marine algae and fish protein as food sources

Chun S. U. Kim Ph.D. Asst. Professor Marine algal taxonomy

## Department of Soil Sciences

Stanley W. Buol Ph.D. Assoc. Professor Soil genesis

Maurice G. Cook Ph.D. Assoc. Professor Soil mineralogy

# Sterling B. Weed Ph.D. Professor Soil mineralogy and soil chemistry

William W. Woodhouse Ph.D.
Professor
Coastal dune stabilization

### Department of Zoology

# Phyllis C. Bradbury Ph.D. Asst. Professor Fine structure and morphogensis of marine protozoa

# Billy J. Copeland Ph.D. Assoc. Professor and Director, Pamlico Marine Laboratory, Aurora Estuarine ecology; effects of environmental stresses

# William W. Hassler Ph.D. Professor and Director, Hatteras Marine Laboratory, Hatteras Island Fishery biology; marine game fish survey

# Don W. Hayne Ph.D. Professor Biometrics; ecology; population dynamics

# F. Eugene Hester Ph.D. Assoc. Professor and Director, N. C. Cooperative Fishery Unit Fishery biology

# John E. Hobbie Ph.D. Assoc. Professor Limnology; estuarine biology and plankton physiology

# Harbor House Marine Science Center, Wrightsville Beach

# Durwood Baggett Director and County Extension Chairman Education and training in marine-related fields

# Water Resources Research Institute

# David H. Howells Director and Professor Mater resources information and research

# UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

## Department of Bacteriology

# Harry Gooder Ph.D. Professor Comparison of wall-less and marine

#### William R. Straughn Ph.D. Assoc. Professor Bacterial physiology

# Robert Twarog Ph.D. Asst. Professor Microbial chemistry control and regulation of enzyme synthesis

# Department of Biochemistry

# Carl E. Anderson Ph.D. Professor Phospholipids and lipid glyceryl ethers of marine animals

#### M. K. Berkut Ph.D. Assoc. Professor Marine hematology

# J. Logan Irvin Ph.D. Chairman and Professor Marine biochemistry

# Ralph Penniall Ph.D. Professor Sea urchins as a source of tissue nuclei

# George K. Summer Ph.D. Assoc. Professor Biochemistry and developmental biology

## Department of Botany

#### Max H. Hommersand Ph.D. Assoc. Professor Marine algae

# William J. Koch Ph.D. Professor Marine fungi

Helmut Lieth Ph.D. Professor Ecology

J. Frank McCormick Ph.D. Assoc. Professor Marine ecology

# Department of Chemistry

J. L. Coke Ph.D.
Assoc. Professor
Alkaloids in marine plants and animals

# Department of City and Regional Planning

Maynard M. Hufschmidt Ph.D.
Professor
Environmental and regional planning

Hugh Knox Lecturer Regional economic analysis

David H. Moreau Ph.D.

Asst. Professor

Systems analysis of environmental control systems

Francis Parker Ph.D.
Asst. Professor
State and regional planning

# Department of Environmental Sciences and Engineering

J. Donald Johnson Ph.D.
Assoc. Professor
Estuarine chemistry and sediments

Edward J. Kuenzier Ph.D.
Assoc. Professor
Marine biology and ecology

John Lyman Ph.D.
Professor
Chemical and physical oceanography

Robert A. Mah Ph.D.
Assoc. Professor
Microbial ecology and anaerobic
microorganisms

Lyman A. Ripperton Ph.D. Assoc. Professor Air sea interchanges

Charles M. Weiss Ph.D.
Professor
Marine biology; distribution of marine organisms; nitrogen and carbon cycles

# Department of Geology

Assoc. Professor
Petrology of igneous and metamorphic rocks in ocean basins

Jenn M. Dennison Eh.D.
Chairman and Professor
Stratigraphy; and sedimentation sampling
theory

David E. Dunn Ph.D.
Assoc, Professor
Structural geology of ocean basins

Paul D. Fullagar Ph.D.
Assoc. Professor
Strontium composition of sea water

Roy L. Ingram Ph.D. Professor Marine sediments

Ben Korgen Ph.D. Asst. Professor Physical oceanography

Virgil I. Mann Ph.D. Professor Mineral deposits

Paul C. Ragiand Ph.D. Assoc. Professor Marine geology

Joseph Saint Jean, Jr. Ph.D. Professor Foraminifera

Daniel A. Textoris Ph.D. Assoc. Professor Marine sediments

#### Joel S. Watkins Ph.D. Assoc. Professor

Marine geophysics

#### Walter H. Wheeler Ph.D.

**Professor** Molluscan taxonomic and ecologic studies

#### William A. White Ph.D.

**Professor** Submarine erosion; shoreline evolution; relict shorelines

# Department of Pathology

# Kenneth Brinkhous M.D. **Professor**

Hematology of marine animals

#### Robert D. Langdell M.D.

Professor Marine pathology

#### R. G. Mason M.D.

Asst. Professor Hemostasis; blood coagulation

#### Nathaniel F. Rodman M.D.

Assoc. Professor

Thrombocytes in marine animals

### Department of Physics

#### Bryce S. DeWitt Ph.D.

**Professor** Geophysics

#### Department of Physiology

#### Robert G. Faust Ph.D.

Assoc. Professor

Physiology of marine organisms

#### John L. Ferguson Ph.D., M.D.

Professor Malacology

# Richard L. Glasser Ph.D.

Assoc. Professor

Control of respiration by the nervous

#### Lloyd Yonce Ph.D.

Assoc, Professor Cardiovascular problems in marine organisms

## Department of Statistics

#### Charles R. Baker Ph.D.

Assoc. Professor Applications of communication theory and stochastic processes

#### M. R. Leadbetter Ph.D.

**Professor** 

Sea noise and frequency of transmitted sound

## Department of Zoology

#### Donald P. Costello Ph.D.

Professor

Embryology; cytology; fine structure; chromosomes

#### Catherine Henley Ph.D.

Research Associate Embryology; cytology; fine structure; sperm

# Charles E. Jenner Ph.D.

Professor

Biology of marine invertebrates

#### H. E. Lehman Ph.D.

Professor

Experimental embryology of marine organisms

#### Elizabeth McMahan Ph D.

Assoc. Professor

Ecology; behavior of marine organisms

#### Helmut C. Mueller Ph.D.

Asst. Professor

Behavior of marine animals

#### Howard T. Odum Ph.D.

Professor

Ecosystems; oceanography

## Rupert J. M. Riedl Ph.D.

Professor

Marine invertebrates

#### Alan E. Stiwen

Assoc. Professor Population ecology

#### Richard B. Terry Ph.D.

Asst, Presfessor

Development of marine organisms

#### School of Dentistry

#### Miles A. Czenshaw Ph.D.

Asst. Professor Calcification in molluscs; comparative biodiffmistry and physiology

#### Jerry Nett Ph.D.

AsstulProfessor Calcification in invertebrates; electron microscopy

#### School of Law

#### Thomas J. Schoenbaum

Asst. Professor Management regulation legislation regarding development of marine resources

# School of Pharmacy

Cicude Piantidosi Ph.D.

Professor Marine biochemistry

# UNIVERSITY OF NORTH CAROLINA INSTITUTE OF MARINE SCIENCES

# Alphonse F. Chestnut Ph.D.

Director and Professor Marine ecology; physiology and ecology of molluscs

# William E. Fahy Ph.D.

Professor Ichthyology; experimental studies of environment and response of meristic structures in young fishes

#### Jan J. Kohlmeyer Ph.D.

Assoc. Professor Marine botany

#### Hugh J. Porter

Asst. Professor Marine ecology; systematics and zoogeography of molluscs

#### Frank J. Schwartz Ph.D.

Assoc. Professor Zoogeography of fishes

#### Austin B. Williams Ph.D.

Professor Marine ecology; systematics and zoogeography of decapod crustacea

#### William J. Woods Ph.D.

Assoc. Professor Plankton ecology; nutrient cycles; hydrology; chemistry

# UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

# Department of Biology

Ann McCrary Ph.D.
Asst. Professor
Effects of sewage pollution on marine
invertebrate populations

# WRIGHTSVILLE MARINE BIO-MEDICAL LABORATORY †

# Raigh W. Brauer Ph.D.

Director
Physiology of man and vertebrates in marine environments; physiological effects of high pressures

#### X. Fructus

Physiology of animals in high pressures

# M. R. Jordan

Physiology of aquatic animals and animals under high pressure

Personnel listings as of 1969; later information not available

#### D. E. Parrish

Physiology of animals in high pressures

#### M. E. Sheehan

Physiological effects of high pressures

#### R. O. Way

Physiology of animals in high pressures

### 4 + +

# Carteret County Public Schools

#### Will Hon

Director, Regional Marine Science Project Teacher training in marine science education and ecology

# N. C. Department of the Attorney General

### Thomas Kane

Attorney Legal aspects of state coastal, estuarine and marine problems

# N. C. Department of Conservation and Development, Division of Commercial and Sport Fisheries

#### James T. Brown

Chief of Estuarine Studies and Biologist Coordinates activities of Divison; field studies on dredge and fill permits; estuarine zoning study

#### Walter F. Godwin

Supervisor and Biologist Coordinates and supervises field activities of districts; oyster rehabilitation program

#### Benjamin F. Holland

Project Leader, Exploratory Fishing and Biologist
Off-shore anadromous fish inventory;
harvesting methods for other species;
exploratory fishing

# Thomas L. Linton Ph.D.

Marine fisheries resources

#### Edward G. McCoy

Chief, Research and Development and Biologist Coordinates Division activities;:shrimp studies

#### Fenaress Munden

Biologist

Coordinates statewide experimental seed cyster plantings

#### Samuel J. Reeves

Biologist

Studies on long-term effects on commercially harvesting young foodfish species

# C. Drouglas Ringer

Biologist

Biological investigation of dredge and fill projects; assist in estuarine inventory

#### Dennis Spitsbergen

Biologist

Coordinates statewide oyster rehabilitation program and experimental seed oyster plantings

# Michael W. Street

Biologist

Off-shore anadromous fish inventory; harvesting methods for other species; exploratory fishing

#### Maury Wolff

Project Leader, Scrap Fish and Biologist Studies on long-term effects of commercially harvesting young foodfish species

# N. C. Department of Conservation and Development, Seashore Advisory Board

#### Aaron A. Hathcock

Seashore Promotion Officer
Conservation and development of seashore



# N. C. State Ports Authority

James W. Davis
Director
Marine transportation

**\* \* \*** 

# U.S. Department of the Army, Corps of Engineers, Wilmington District

FPaul S. Denison Colonel
District Engineer
Coastal engineering; shore processes;
tidal flow and circulation patterns

Edward G. Long, Jr.
Chief, Engineering Division
Coastal engineering

Limberios Vallianos Chief, Coastal Engineering Section Coastal engineering

# U.S. Department of the Interior, Bureau of Commercial Fisheries, Center for Estuarine and Menhaden Research

Joseph W. Angelovic Ph.D.
Fishery Biologist and Adjunct Asst.
Professor, Dept. Zoology, N.C.S.U.
Radioecology; fish physiology

John P. Baptist Fishery Biologist Radioecology

Robert B. Chapoton
Fishery Biologist
Population dynamics

Randall P. Cheek
Fishery Biologist
Population dynamics

Linda C. Coston
Fishery Biologist
Population dynamics

Ford A. Cross Ph.D.

Oceanographer and Adjunct Asst.

Professor, Dept, Zoology, N.C.S.U.

Radioecology; biological oceanography

Harry S. Davis
Fishery Reporting Specialist
Commercial fishery statistics

Robert L. Dryfoos Ph.D. Fishery Biologist Population dynamics

Donnie L. Dudley
Fishery Biologist
Population dynamics

David W. Engel Fishery Biologist Radiation physiology

Kenneth C. Harris
Fishery Reporting Specialist
Commercial fishery statistics

William F. Hettler, Jr. Fishery Biologist Fish physiology

John E. Hollingsworth
Computer Systems Analyst
Computer programming

Donald E. Hoss

Fishery Biologist

Fish physiology and ecology

Gene R. Huntsman Ph.D. Fishery Biologist Population dynamics

Mayo H. Judy
Fishery Biologist
Population dynamics

Paggy M. Keney
Fishery Biologist
Environmental data compilation

Richard L. Kroger
Fishery Biologist
Population dynamics

Robert M. Lewis
Fishery Biologist
Effects of environmental factors on fish

Richard W. Lichtenheld Ph.D. Fishery Biologist Physiology; behavioral ecology Thomas W. McKenney Ph.D.
Fishery Biologist
Ichthyology-larval fish studies;
biological oceanography

William R. Nicholson Fishery Biologist Population dynamics

Richard O. Parker, Jr. Fishery Biologist Population dynamics

Thomas J. Price
Fishery Biologist
Radioecology and benthic energetics

John W. Reintjes
Fishery Biologist
Fish ecology

Theodore R. Rice Ph.D.
Director and Adjunct Professor, Dept.
Zoology, N.C.S.U.
Phytoplankton physiology; marine
radiobiology and ecology

William E. Schaaf
Biologist
Ecology and biometrics

Glenn B. Sekavec Fishery Biologist Population dynamics

Gordon W. Thayer Ph.D. Fishery Biologist Estuarine energy flow

William R. Turner Fishery Biologist Fish ecology

Stanley M. Warten Fishery Biologist Population dynamics

Richard B. Williams Ph.D.
Fishery Biologist and Adjunct Asst.
Professor, Dept. Zoology, N.C.S.U.
Marine ecology; systems analysis;
plankton energetics and productivity

lames N. Willis, III
Fishery Biologist
Chemical oceanography

Douglas A. Wolfe Ph.D.

Research Chemist and Adjunct Asst. Professor, Dept. Zoology, N.C.S.U. Marine and estuarine radioecology: biology of molluses, comparative biochemistry

U.S. Department of the Interior, Office of Saline Water — Wrightsville Beach Test Facility

Wilfred J. Hahn Manager

Saline water conversion technology and processes

W. M. Høher Field Engineer

Coastal Zone Resources Corporation of N.C.

David A. Adams Ph.D.
President
Research and consulting in marine resources

The International Nickel Company, Inc., Francis L. LaQue Corrosion Laboratory

David B. Anderson
Engineer
Engineering aspects of marine corrosion

Alfred O. Barry
Engineer
Mechanical engineering aspects of marine
corrosion

W. W. Kirk

Manager

Marine corrosion research and testing;
improved alloys for ocean engineering
and marine functions; nuclear metallurgy

Kenneth L. Money
Engineer
Metallurgy and marine corrosion

Victor G. Taylor Asst. Manager Marine atmospheric corrosion

# Marine Chemurgics, Inc.

T. M. Miller
Director
Development of marine protein supplements; mariculture of catfish, crayfish and shrimp; development of uses for fish

Maritime Services, Inc.

P. A. Johnson
Director
Prototype testing, construction and
evaluation; oceanographic engineering;
equipment development; pollution
control equipment design



# **SOUTH CAROLINA**

# **BAPTIST COLLEGE**

# Department of Biology

Clarence Chesnutt Ph.D. Professor Marine biology

### THE CITADEL

# Department of Biology

Robert E. Baldwin Ph.D.
Assoc. Professor
Effects of pollution on lipid metabolism
of marine animals

Emory S. Crosby Ph.D.
Assoc. Professor
Microbiology and botany of estuaries

Dennis M. Forsythe
Asst. Professor
Feeding ecology, social organization
and population dynamics of coastal
and estuarine shorabirds

Bernard M. J. Kelly, Jr. Ph.D.
Asst. Professor
Development of estuarine arthropods;
physiological ecology of other marine
invertebrates

Gerald L. Runey Ph.D.
Assoc. Professor
Lipid studies of various marine
organisms and effects of pollutants
on lipids

Frank Seabury
Asst. Professor
Marine fungi and algae of S.C.

James A. Timmerman, Jr. Ph.D.

Head and Professor

Protozoa and helminth parasites of
marine animals; toxicology of chemicals
on parasites and hosts

# Department of Business Administration

David F. L. Bernthal
Asst. Professor
Market possibilities for fishing in the
coastal plains region

Robert L. Brown, Jr.
Asst. Professor
Marketing and biostatistics

# Department of Chemistry and Geology

William S. Hummers, Jr. Ph.D.
Professor
Structure of clay complexes and thermodynamics; marine geochemistry

Charles F. Jumper Ph.D.
Professor
Ion exchange properties of clay and thermodynamic properties of electrolyte solutions

Henry D. Wagener
Asst. Professor
Marine processes and mineralogy; geochemistry and geology

# Department of Civil Engineering

Raymond M. Clock Ph.D. Assoc. Professor Environmental engineering

#### Department of Physics

R. S. Bender Ph.D. Professor X-ray diffraction



## **CLEMSON UNIVERSITY**

# College of Engineering

J. F. Andrews Ph.D.

Professor

Aquatic pollution

S. F. Huibert Ph.D. Assoc. Professor Ocean engineering materials

# Department of Agricultural Economics

J. C. Hite Ph.D.
Asst. Professor
Structure of seafood industry in
South Carolina; evaluation of estuarine
resources

J. M. Stepp Ph.D.\*

Professor

Natural resources economics

# Department of Entomology & Economic Zoology

R. C. Fox Ph.D. Professor Entomology

H. A. Loyacano Ph.D. Fisheries biology

R. Noblet Ph.D. Physiology

J. K. Read Ph.D.
Professor
Toxicology, protozoology

L. G. Webb Ph.D. Assoc. Professor Wildlife biology

# Division of Biology

W. E. Bachop Ph.D. Embryology R. K. Guthrie Ph.D.

Aquatic bacteriology, pollution

M. J. B. Paynter Ph.D.
Asst. Professor
Bacterial physiology, mixed cultures

A. S. Tombes Ph.D.
Assoc. Professor
Invertebrate endocrinology

Clyde J. Umphlett Ph.D. Aquatic mycology

W. L. Willard Ph.D. Radio-biology

### Water Resources Research Institute

A. W. Snell Ph.D.\*

Chairman of the Directorate

Water resources research

# **COLLEGE OF CHARLESTON**

# Department of Biology

William D. Anderson Ph.D.
Asst. Professor
Systematics and development of marine fishes

Mildred C. Chamberlain Ph.D.
Research Associate
Annelid larval development

Norman A. Chamberiain Ph.D.
Director of George D. Grice Marine
Laboratory and Assoc. Professor
Environmental influences on the
metamorphosis of marine invertebrates

Harry W. Freeman Ph.D.
Professor
Ecology of estuarial fishes

Maggie Thurman Pennington Ph.D. Assoc. Professor Plant anatomy and physiology

<sup>\*</sup>Consultant to the S. C. Water Resources Commission

# MEDICAL UNIVERSITY OF SOUTH CAROLINA

#### Julian Keil

Research Associate
Marine research (pesticides)

# UNIVERSITY OF SOUTH CAROLINA

# Belle W. Baruch Institute for Estuarine and Littoral Science

## John Mark Dean Ph.D.

Assoc. Professor of Biology Physiological ecology; temperature adaptation in marine animals; fish biology

## Patricia DeCoursey Ph.D.

Research Associate Biological rhythms

## F. John Vernlerg Ph.D.

Director and Baruch Professor of Marine Ecology
Physiological ecology; adaptation to environmental stress of marine adults and lighter

### Winona B. Vernberg Ph.D.

Research Professor of Biology Invertebrate physiology; hostsymbiont relationships

Richard Zingmark Ph.D. Marine phytoplankton

# Department of Biology

# Wade T. Batson Ph.D.

Professor\*

Plant taxonomy and ecology; coastal and marsh flora

## B. T. Cole Ph.D.

Professor\*

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Radionuclide distribution in estuary and
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Chief, Marine Chart Division
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and mapping; general surveys

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Sudderth, B.D	Weiby, C.W
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Sullivan, B.T	White, R.C
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